



EPI WATCH

Monthly Epidemiology and Preparedness Newsletter

October 2016

Florida Department of Health in Pinellas County

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Division of Disease Control and Health Protection



Disease Reporting

To report diseases and clusters of illness:

Phone: (727) 824-6932
Fax: (727) 820-4270
(excluding HIV/AIDS)

To Report HIV/AIDS by mail:

Surveillance Room 3-138
205 Dr. MLK Jr St. N
St. Petersburg, FL 33701

Animal Bite Reporting:
Phone: (727) 524-4410
x7665

Perinatal Hepatitis C Infections

By Kyle Olle

Viral Hepatitis is the leading cause of liver failure, cirrhosis, and liver cancer in the United States and an estimated 3.9 million individuals chronically infected with the hepatitis C virus (HCV) ². An individual is classified as having chronic hepatitis C if the viral infection has persisted 6 months after the initial infection ². The majority of people infected with HCV never develop symptoms and can be chronically infected for years before outward indications of the virus appear. HCV is primarily transmitted by blood to blood exposures including sharing personal care items, intravenous drug use, incarceration, sharing of medical equipment, body modifications performed with unsterile equipment, tending to an infected person's wounds without gloves, and being born to mother with an active HCV infection. HCV infection is transmissible if an individual is HCV RNA positive.



HCV is the leading cause of chronic liver disease in children and is primarily acquired through vertical transmission from mother to child ^{1,3,4}. Transmission does not occur during the pregnancy but may occur at the time of birth when the placental membrane is ruptured ¹. The probability of a child infected at birth becoming chronically infected is approximately 6% (range 1-11%) ³. HCV is not present in breast milk and transmission does not occur during breastfeeding unless the nipples are chafed or broken skin is present. Increased probability of vertical transmission has been associated with the mother having a viral load greater than 600,000 IU/mL or being co-infected with Human Immunodeficiency Virus (HIV) ^{1,2,4}. In co-infected mothers, the vertical transmission rate was found to be 43% with 30% becoming chronically infected ². Some vertically infected children clear the virus in the first 18 months after birth ^{1,3,4}. The probability of clearance for children born to a mother without HIV is 65% and 33% for a child born to a co-infected mother ¹. There are no measures that can be performed to prevent the vertical transmission of HCV and many pediatric cases are asymptomatic until cirrhosis of the liver occurs ^{1,3}. Treatment for chronically infected pediatric cases over the age of 3 years old is available ³.

Diagnosis of perinatal HCV begins with proper screening and testing of pregnant women at obstetricians' offices during prenatal care. Mothers who have history of high risk behaviors associated with HCV should be tested for the HCV antibody. If the mother is found to be HCV antibody reactive then the next serological test to be performed is the HCV RNA to confirm the infection. If no viral load is detected at initial testing, the HCV RNA test should be performed throughout the pregnancy to continue to confirm that infection is not present. The recommended age to initiate testing in infants varies widely between medical organization recommendations ^{1,3,4}. Because of the probability of clearance of the virus prior to 18 months, initiating HCV antibody and RNA testing for up to 18 months is a reasonable approach in management of infants born to chronic HCV mothers ⁴. Once HCV antibody testing is initiated and the infant is found to be reactive, the same HCV RNA serological testing recommended for mothers is used to confirm an active infection. HCV RNA testing should be repeated after 18 months due to the probability of clearance of the virus.

References:

- 1) Angeles Ruiz-Extremera, J. A.-G.-R.-P.-M.-N.-H. (2011). Genetic Variation in Interleukin 28B with Respect to Vertical Transmission of Hepatitis C and Spontaneous Clearance in HCV-Infected Children. *Hepatology*, 1830-1838.
- 2) CDC. (2016, May 23). *Viral Hepatitis - Hepatitis C Information*. Retrieved October 11, 2016, from Center for Disease Control: <http://www.cdc.gov/hepatitis/hcv/cfaq.htm#overview>
- 3) Danica E. Kuncio, E. C. (2016, April 15). Failure to Test and Identify Perinatally Infected Children Born to Hepatitis C Virus-Infected Women. *Clinical Infectious Diseases*, 62, 980-985.
- 4) Petrova, A. B. (2016). Single Clinical Practice's Report of Testing Initiation, Antibody Clearance, and Transmission of Hepatitis C Virus (HCV) in Infants of Chronically HCV-Infected Mothers. *Open Forum Infectious Disease*, 1-5. doi:10.1093/ofid/ofw021

All Hepatitis C infections should be reported by the following business day to your local health department.



Zika Virus: Recent MMWR's



Characteristics of Children Aged <18 Years with Zika Virus Disease Acquired Postnatally— U.S. States, January 2015–July 2016

During January 2015–July 2016, a total of 158 cases of confirmed or probable postnatally acquired Zika virus disease among children aged <18 years were reported to CDC from U.S. states. The median age was 14 years (range = 1 month–17 years), and 88 (56%) were female. Two (1%) patients were hospitalized; none developed Guillain-Barré syndrome, and none died. All reported cases were travel-associated. Overall, 129 (82%) children had rash, 87 (55%) had fever, 45 (29%) had conjunctivitis, and 44 (28%) had arthralgia.

Update: Interim Guidance for Preconception Counseling and Prevention of Sexual Transmission of Zika Virus for Persons with Possible Zika Virus Exposure — United States, September 2016

Based on new though limited data, CDC now recommends that all men with possible Zika virus exposure who are considering attempting conception with their partner, regardless of symptom status,[§] wait to conceive until at least 6 months after symptom onset (if symptomatic) or last possible Zika virus exposure (if asymptomatic). Recommendations for women planning to conceive remain unchanged: women with possible Zika virus exposure are recommended to wait to conceive until at least 8 weeks after symptom onset (if symptomatic) or last possible Zika virus exposure (if asymptomatic).

The complete MMWR reports are available here: <http://www.cdc.gov/mmwr/index2016.html>

2016 Annual Drive-thru/Walk-in Flu Clinic

Flu Boo III

flu shots for ages 3 and up

Don't boo hoo with the flu. Get a flu shot at no cost to you!

Wednesday, Oct. 26, 2016
5:30pm to 8:30pm (while supplies last)

Florida Department of Health in Pinellas County
6350 76th Ave N, Pinellas Park, FL 33781

Fill out your registration form by visiting
www.pinellas.floridahealth.gov
Contact us at 727-824-6900 for more information

Trick or treat! The Florida Department of Health in Pinellas County's (DOH-Pinellas) **Flu Boo III** will provide flu shots at **no cost** on Wednesday, October 26, 2016 in Pinellas Park.

From 5:30 to 8:30 PM (or until supplies last), DOH-Pinellas staff and volunteers will provide flu vaccines at Pinellas Park health department, located at 6350 76th Ave. N. Participants can remain in their cars while they get their flu shot at the drive-through or come inside the building's clinic area.

Yearly flu vaccines are recommended for anyone older than six months of age, but they're especially important for seniors, pregnant women and people with underlying health conditions. This season's vaccines have been developed to match circulating influenza viruses.

In addition to maintaining good health habits and washing your hands with soap and water, a yearly flu vaccine is the best way to protect yourself and others from influenza. It takes about two weeks after vaccination for protection to set in, so late October is a good time to get immunized before holiday gatherings in November and December.

Selected Reportable Diseases in Pinellas County

Disease	Pinellas		YTD Total		Pinellas County Annual Totals		
	September 2016	September 2015	Pinellas 2016	Florida 2016	2015	2014	2013
A. Vaccine Preventable							
Measles	0	0	0	5	0	0	0
Mumps	0	0	0	14	0	0	0
Pertussis	3	3	15	265	17	19	17
Varicella	5	2	65	590	38	35	19
B. CNS Diseases & Bacteremias							
Creutzfeldt-Jakob Disease (CJD)	0	0	1	13	3	0	0
Meningitis (Bacterial, Cryptococcal, Mycotic)	1	0	6	89	6	4	5
Meningococcal Disease	0	0	0	11	1	0	1
C. Enteric Infections							
Campylobacteriosis	13	19	98	1521	104	103	63
Cryptosporidiosis	3	1	24	415	49	240	19
Cyclosporiasis	0	0	5	36	3	0	5
<i>E. coli Shiga Toxin (+)</i>	1	0	2	133	2	6	7
Giardiasis	4	3	29	863	30	42	34
Hemolytic Uremic Syndrome (HUS)	0	0	0	6	0	0	1
Listeriosis	0	1	1	26	2	0	0
Salmonellosis	29	29	127	3951	196	216	203
Shigellosis	2	10	16	530	174	21	5
D. Viral Hepatitis							
Hepatitis A	0	0	2	90	4	2	6
Hepatitis B: Pregnant Woman +HBsAg	0	3	20	318	37	21	17
Hepatitis B, Acute	7	5	48	494	57	44	39
Hepatitis C, Acute	3	2	36	214	32	19	17
E. VectorBorne/Zoonoses							
Animal Rabies	1	0	3	56	1	2	0
Rabies, possible exposure	14	11	103	2429	114	190	193
Chikungunya Fever	0	0	1	12	2	10	0
Dengue	0	0	2	59	3	1	2
Eastern Equine Encephalitis	0	0	0	1	0	0	0
Lyme Disease	2	1	11	142	6	5	8
Malaria	0	0	0	55	2	3	1
West Nile Virus	0	0	1	9	1	0	0
Zika Virus	0	0	17	799	0	0	0
F. Others							
AIDS**	6	7	102	n/a	118	129	114
HIV**	21	26	202	n/a	252	171	157
Chlamydia	316	342	3130	n/a	4147	3853	4141
Gonorrhea	129	114	1200	n/a	1438	1295	1424
Hansen's Disease	0	0	0	14	0	0	0
Lead Poisoning: Children < 6 years:	0	0	5	111	6	8	4
Legionellosis	2	3	14	210	18	13	10
Mercury Poisoning	0	0	0	16	1	2	0
Syphilis, Total	24	19	137	n/a	283	186	114
Syphilis, Infectious (Primary and Secondary)	11	11	137	n/a	151	75	52
Syphilis, Early Latent	8	5	111	n/a	83	61	37
Syphilis, Congenital	0	0	1	n/a	3	0	0
Syphilis, Late Syphilis (Late Latent; Neurosyphilis)	5	3	45	n/a	52	50	25
Tuberculosis	3	4	15	n/a	14	25	30
<i>Vibrio Infections</i>	1	1	6	136	11	10	11

n/a = not available at this time. Blank cells indicate no cases reported. Reportable diseases include confirmed and probable cases only. All case counts are provisional. Data is collected from the Merlin Reportable Disease database, surveillance systems maintained at the Florida Department of Health in Pinellas County, and Florida CHARTS <http://www.floridacharts.com/charts/default.aspx>.

**STD data in PRISM is continually updated. Please note, data from the previous month takes up to an additional month or more to be correctly updated.

**Current HIV Infection data by year of report reflects any case meeting the CDC definition of 'HIV infection' which includes all newly reported HIV cases and newly reported AIDS cases with no previous report of HIV in Florida. If a case is later identified as being previously diagnosed and reported from another state, the case will no longer be reflected as a Florida case and the data will be adjusted accordingly. Data from the most recent calendar year (2015 or 2016) are considered provisional and therefore should not be used to confirm or rule out an increase in newly reported cases in Florida.